



***A POWERFUL  
LINEUP OF  
INNOVATION  
AND TECHNOLOGY***



# **INTRODUCING MIDDLEBY**

Headquartered in the United States with over 10,000 employees worldwide in 100 countries, **Middleby**, a publicly traded corporation, is a worldwide manufacturer of commercial kitchen equipment, residential appliances and systems for industrial food processing, packaging, and baking.

With more than 100 brands between the three business segments, Middleby designs, manufactures, markets, and services its products worldwide. 1 out of 3 restaurants in the world use our equipment! If you ate or drank something today, there's a good chance Middleby played a role in the preparation.

**30,000 installations  
in over 100 countries**

**Over 500 years of  
technical food processing  
expertise with top tier  
service and support**

**Powerful brands under  
one umbrella, serving  
the global market with  
proven and state-of-the-  
art solutions**

**THIS IS INNOVATION. THIS IS MIDDLEBY.**





# **ONE PARTNER, SO MANY SOLUTIONS.**

At Middleby we develop the most advanced solutions for commercial, industrial and residential foodservice. Whether our customers are feeding their families or thousands of patrons, we are proud to be their trusted partner.

Our industry-leading innovation coupled with our dedicated, knowledgeable employee base allows us to best serve our customers around the world.

For a complete list of Middleby brands see:  
[www.middleby.com](http://www.middleby.com)



## **FOOD PROCESSING**

*Middleby Food Processing Group partners with industrial protein and bakery processors, providing the most advanced operations solutions.*

## **FOODSERVICE AND BEVERAGE**

*Middleby is the worldwide leader in commercial kitchens, offering the most advanced innovations for cooking and warming, refrigeration, and beverage solutions for top restaurant and institutional customers.*

## **RESIDENTIAL**

*Middleby is the leader in the ultra-premium, residential kitchen appliance market providing the most recognizable and technologically-advanced consumer brands in use globally.*



**OUR BAKERY BRANDS**



High Capacity Serpentine  
Solution for all Bakery Categories



Proof | Bake | Cool



Pan Shakers | Topping Applicators  
Water Splitters | Closure Systems



Professional Mixers



Bread Dough  
Make-up Machinery



Liquid Packaging Systems



Complete Biscuit and  
Cracker Solutions



High-Capacity Bread and  
Bun Conveyorized Systems



Professional Baking Machinery

**OUR PROTEIN BRANDS**



Cook | Chill | Smoke  
Roast | Pasteurize



Automated Cook  
Chill | Ham | Sous Vide



Transport | Grind | Mix  
Brine | Massage | Emulsify



Modified Atmosphere  
Packaging



Press | Massage | Tenderize  
Defrost | Separate | Mould



Align | Convey | Autoload



Defrost | Cook | Chill  
Smoke | Roast | Pasteurize  
Dry | Mature



Portion | Form  
Batter | Bread | Fry



Rollstock Vacuum and  
Modified Atmosphere  
Packaging



Slicing Systems  
Bacon | Meat | Cheese



AGV Robot  
Loading | Unloading



Premier Thermoforming Solutions

**OUR PROTEIN AND BAKERY BRANDS**



Washing | Sanitizing | Drying



Fill | Deposit | Portion | Pump



Automated Logistic  
Solutions



Automated Guided Vehicles



Interleavers | Stackers  
Interleaving Materials



Freeze | Chill  
Steam | Proof

# MEET OUR PROTEIN BRANDS

## PROCESSING & PREPARATION

**COZZINI**

Transport | Grind | Mix  
Brine | Massage | Emulsify

**DANFO TECH**

Press | Massage | Tenderize  
Defrost | Separate | Mould

**HINDS-BOCK**

Fill | Deposit | Portion

**MP EQUIPMENT**

Portion | Form  
Batter | Bread | Fry

## THERMAL PROCESSING

**ALKAR**

Cook | Chill | Smoke  
Roast | Pasteurize

**Armor  
Inox**

Automated Cook  
Chill | Ham | Sous Vide

**maurer-atmos**

Mature | Dry | Smoke  
Cook | Roast | Pasteurize  
Chill | Defrost

**SCANICG**

Freeze | Chill  
Steam | Proof



## SLICING, LOADING & PACKAGING

**CV·TEK**

Modified Atmosphere  
Packaging

**DRAKE**

Align | Convey | Autoload

**pacproinc**

Interleavers | Stackers  
Interleaving Materials

**RAPIDPAK**

Rollstock Vacuum and  
Modified Atmosphere  
Packaging

**THURNE**

Slicing Systems  
Bacon | Meat | Cheese

**VISIONPAK™**

Premier Thermoforming  
Solutions

## FACILITY AUTOMATION & EQUIPMENT SANITATION

With the implementation of on-site automation, the future of facilities, for both bakery and protein is rapidly changing and becoming more user-friendly and cost-effective.

**COLUSSi ERMES**

Washing | Sanitizing | Drying

**Key-Log**

Automated Logistic  
Solutions

**PROXNUT**

Automated Guided Vehicles

**VEMAC**

AGV Robot  
Loading | Unloading





# TECHNOLOGY IMPACTING AN INDUSTRY

## Middleby offers its customers and prospects a one-stop destination for turnkey equipment solutions.

While our equipment is powerful enough to meet the demands of the highest volume processors, we also offer scaled down systems as well as single machine solutions.

With decades of deep industry and technical expertise, we bring together food processing insight, best practices, breakthrough / disruptive equipment solutions and systems innovation. We consistently provide on-time deliveries, smooth startups, and optimized processes, all of which ultimately equate to very favorable returns on investment.

### Put Middleby **know-how** and innovation to work for you:

- ▶ **Lower Cost** of Ownership
- ▶ **Minimized** Operating Costs
- ▶ **Maximized** Capacity Utilization
- ▶ **Reduced** Energy Consumption
- ▶ **Efficient** Waste Minimization





# LET'S CUT TO THE CHASE

Middleby develops industrial scale, industry-leading protein solutions for processing, slicing, and packaging. The Middleby Corporation food processing brands manufacture high-volume equipment as well as scaled down systems that meet all your food processing needs.

## **ALTERNATIVE PROTEIN**

From **2,000 lbs/hr**  
to **12,000 lbs/hr and up**

## **SAUSAGE & HOT DOG**

From **3,000 lbs/hr**  
to **20,000 lbs/hr**

## **SALAMI & DRY CURE**

From **5,000 lbs/hr**  
to **10,000 lbs/hr**

## **DELI & LUNCH MEAT**

From **2,000 lbs/hr**  
to **16,000 lbs/hr**

## **BACON**

From **1,600 lbs/hr**  
to **5,000 lbs/hr**

## **SOUS VIDE**

From **200 lbs/hr**  
to **20,000 lbs/hr**

## **POULTRY**

From **6,000 lbs/hr**  
to **18,000 lbs/hr**

## **PET FOOD**

From **3,000 lbs/hr**  
to **12,000 lbs/hr and up**

## **CASE READY**

From **1,000 lbs/hr**  
to **4,000 lbs/hr**



A SEAMLESS  
COMBINATION  
OF BRANDS FOR  
ONE FULL-LINE  
BREAKTHROUGH  
SOLUTION

**CENTRALIZED PROJECT  
EXECUTION**

The intelligent integration of equipment by experienced project engineers results in smooth production processes.

**DELIVERED BY  
EXPERT PEOPLE**

Food Technologists with decades of industry knowledge provide food processing insight.



**ACCELERATE PROCESSING**  
**IMPROVE THROUGHPUT**



**INCREASE YIELDS**  
**RAISE PROFITABILITY**



**EXPAND CAPACITY**  
**MORE PRODUCTION, LESS PEOPLE**



**REDUCE COSTS**  
**OPERATING AND CAPITAL**



**MAXIMIZE SANITATION**  
**SAFER DESIGN, EASIER CLEANING**



**MAINTAIN CONSISTENCY**  
**HIGHER QUALITY**



**PRACTICE SUSTAINABILITY**  
**TAKE ENVIRONMENTAL  
RESPONSIBILITY**



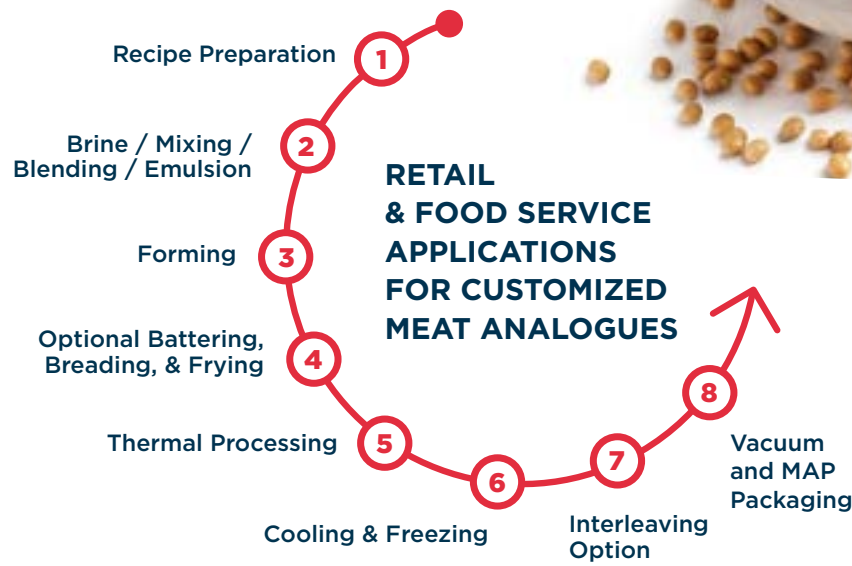


**MIDDLEBY,**  
**WHERE ALL**  
**INNOVATION**  
**LINES UP.**



TOP OF THE LINE

# ALTERNATIVE PROTEIN



- ✓ **MAXIMIZE EFFICIENCY**  
Processing capacities  
At 2-4 tons/hr
- ✓ **COST EFFECTIVE**  
Highly automated material  
handling
- ✓ **NO COMPROMISE**  
Top of the line quality,  
and highest yields



- › Multi-dimensional, versatile forming
- › Compact footprint

*Washing | Sanitizing | Drying*



- › Increase yield, quality & consistency
- › Consistent quality: color, flavor & texture

- ALKAR** Cook | Chill | Smoke  
Roast | Pasteurize
- Armor  
Inox** Automated Cook  
Chill | Ham | Sous Vide
- COLUSSI ERMES** Washing | Sanitizing | Drying
- COZZINI** Transport | Grind | Mix  
Brine | Massage | Emulsify
- CV-TEK** Modified Atmosphere  
Packaging
- MP EQUIPMENT** Portion | Form  
Batter | Bread | Fry
- pacproinc** Interleavers | Stackers  
Interleaving Materials
- RAPIDPAK** Rollstock Vacuum and  
Modified Atmosphere  
Packaging
- scanicg** Freeze | Chill | Steam | Proof
- VISIONPAK** Premier Thermoforming  
Solutions

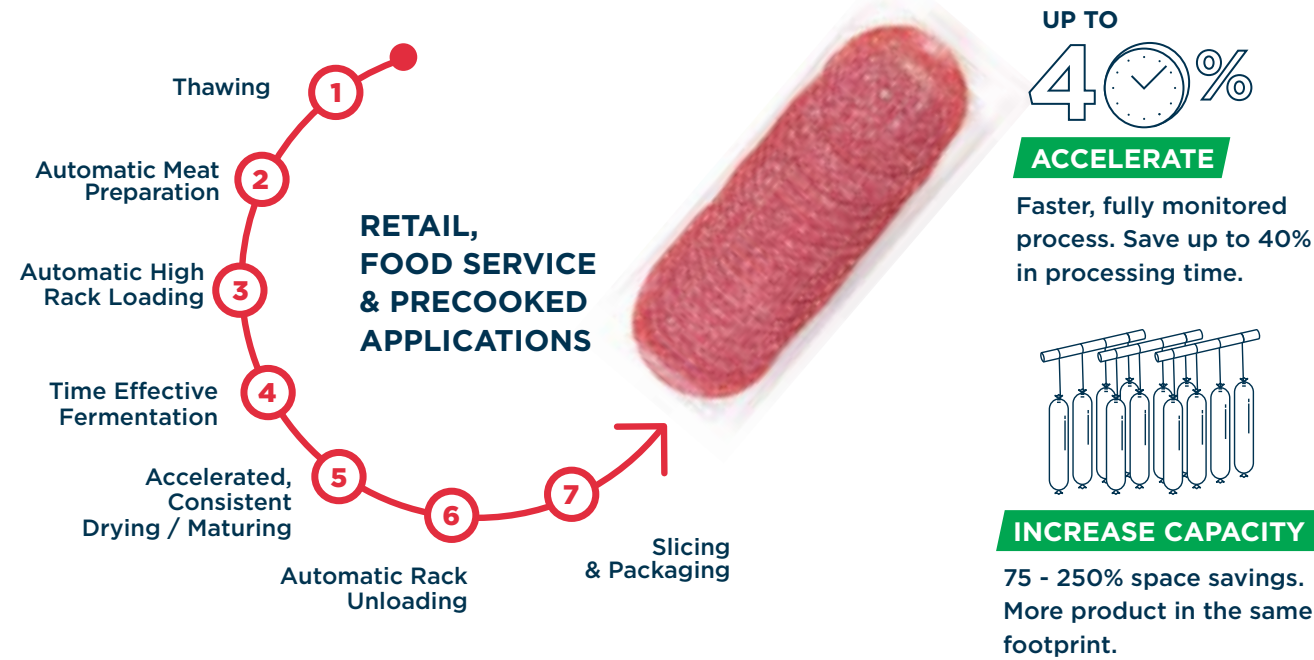


**PLANTING SEEDS OF INNOVATION:  
CULTIVATING TOMORROW'S  
SOLUTIONS TODAY!**



TOP OF THE LINE

# SALAMI & DRY CURE



- › Seamlessly integrated processing with robotic product transfers
- › Highest yield / capacity, quality, consistency - less weight loss

- › Enhanced energy efficiency
- › Decreases human contact & operator fatigue
- › All applications with loading / packaging



- ALKAR** Cook | Chill | Smoke  
Roast | Pasteurize
- COLUSSI ERMES** Washing | Sanitizing | Drying
- COZZINI** Transport | Grind | Mix  
Brine | Massage | Emulsify
- DANFOTECH** Press | Massage | Tenderize  
Defrost | Separate | Mould
- maurer-atmos** Mature | Dry | Smoke  
Cook | Roast | Pasteurize  
Chill | Defrost
- RAPIDPAK** Rollstock Vacuum & Modified  
Atmosphere Packaging
- THURNE** Slicing Systems  
Bacon | Meat | Cheese
- VEMAC** AGV Robot  
Loading / Unloading
- VISIONPAK** Premier Thermoforming  
Solutions

TOP OF THE LINE

# SAUSAGE & HOT DOG



- › Customizable automated process for each product and facility size
- › Highest yield / capacity
- › Fastest cooking process - smoke, cook, cool, & chill

- › Consistent quality: color, flavor & texture
- › Advanced sanitary design for pasteurization, seal, label, and package



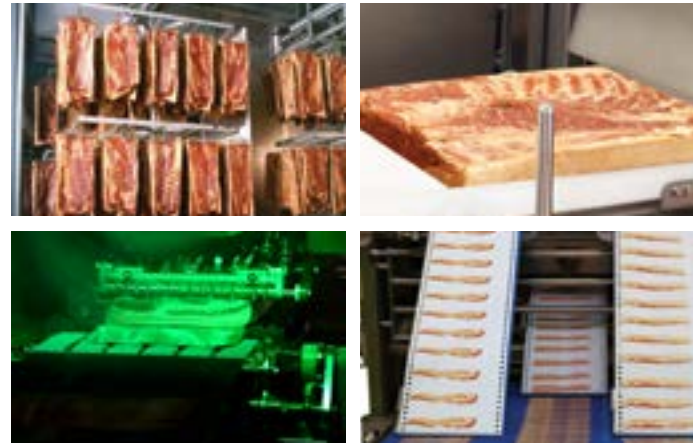
- ALKAR** Cook | Chill | Smoke  
Roast | Pasteurize
- Armor Inox** Automated Cook  
Chill | Ham | Sous Vide
- COLUSSI ERMES** Washing | Sanitizing | Drying
- COZZINI** Transport | Grind | Mix  
Brine | Massage | Emulsify
- CV-TEK** Modified Atmosphere  
Packaging
- DRAKE** Align | Convey | Autoload
- maurer-atmos** Mature | Dry | Smoke  
Cook | Roast | Pasteurize  
Chill | Defrost
- RAPIDPAK** Rollstock Vacuum and  
Modified Atmosphere  
Packaging
- VISIONPAK** Premier Thermoforming  
Solutions

TOP OF THE LINE

# BACON



**SAVE WATER**  
 / Reduce waste water by more than 50%!  
 / Save 5 million gallons per year!



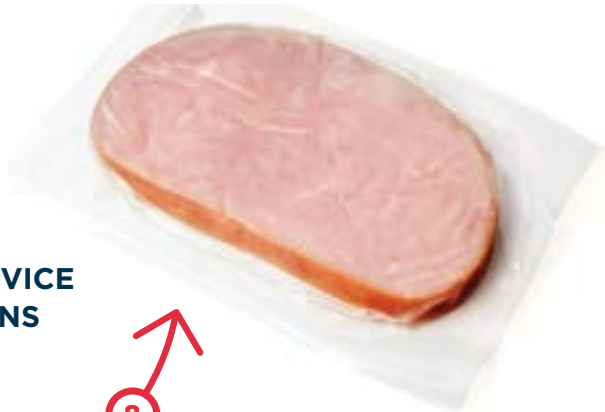
- › Seamlessly integrated processing with robotic product transfers
- › Most efficient use of floor space
- › Increase yield, quality & consistency
- › High capacity: 800 bellies per hour
- › Decrease human contact & operator fatigue
- › Possible for a wide range of product applications

- ALKAR** Cook | Chill | Smoke  
Roast | Pasteurize
- COLUSSI ERMES** Washing | Sanitizing | Drying
- COZZINI** Transport | Grind | Mix  
Brine | Massage | Emulsify
- DANFOTECH** Press | Massage | Tenderize  
Defrost | Separate | Mould
- maurer-atmos** Mature | Dry | Smoke | Cook Roast  
Pasteurize | Chill | Defrost
- EQUIPMENT** Portion | Form | Batter | Bread | Fry

- pacproinc** Interleavers | Stackers  
Interleaving Materials
- RAPIDPAK** Rollstock Vacuum and Modified  
Atmosphere Packaging
- THURNE** Slicing Systems  
Bacon | Meat | Cheese
- VEMAC** AGV Robot | Loading | Unloading  
Combing | Decombing
- VISIONPAK** Premier Thermoforming Solutions

TOP OF THE LINE

# DELI & LUNCH MEAT



- ALKAR** Cook | Chill | Smoke  
Roast | Pasteurize
- ArmorInox** Automated Cook  
Chill | Ham | Sous Vide
- COLUSSI ERMES** Washing | Sanitizing | Drying
- COZZINI** Transport | Grind | Mix  
Brine | Massage | Emulsify
- DANFOTECH** Press | Massage | Tenderize  
Defrost | Separate | Mould
- maurer-atmos** Mature | Dry | Smoke | Cook  
Roast | Pasteurize | Chill | Defrost

- EQUIPMENT** Portion | Form  
Batter | Bread | Fry
- pacproinc** Interleavers | Stackers  
Interleaving Materials
- RAPIDPAK** Rollstock Vacuum and Modified  
Atmosphere Packaging
- THURNE** Slicing Systems  
Bacon | Meat | Cheese
- VEMAC** AGV Robot  
Loading | Unloading
- VISIONPAK** Premier Thermoforming Solutions

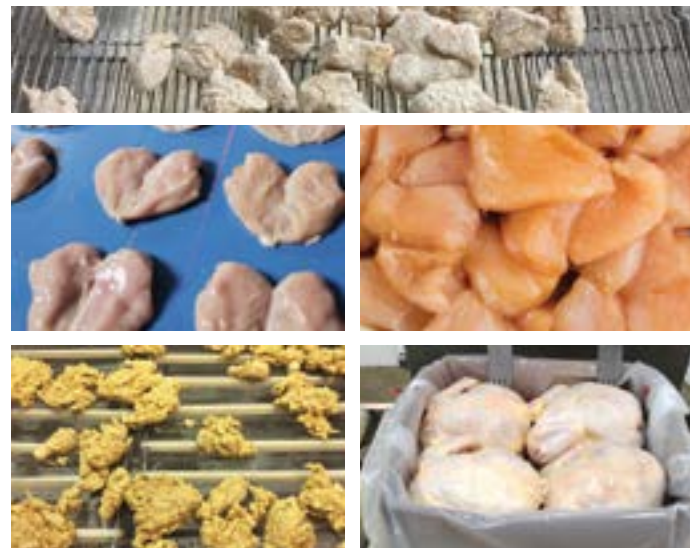


# POULTRY



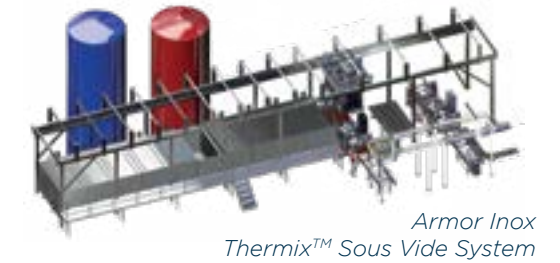
- › Multi-dimensional, versatile forming
- › Highest yield / capacity
- › Increase yield, quality & consistency
- › Consistent quality: color, flavor & texture

- › Fast, automated process times
- › Compact footprint
- › Decrease human contact & operator fatigue



- ALKAR** Cook | Chill | Smoke  
Roast | Pasteurize
- COLUSSI ERMES** Washing | Sanitizing | Drying
- CV-TEK** Modified Atmosphere  
Packaging
- DANFOTECH** Press | Massage | Tenderize  
Defrost | Separate | Mould
- maurer-atmos** Mature | Dry | Smoke  
Cook | Roast | Pasteurize  
Chill | Defrost
- EQUIPMENT** Portion | Form  
Batter | Bread | Fry
- RAPIDPAK** Rollstock Vacuum and  
Modified Atmosphere  
Packaging
- SCANICG** Freeze | Chill | Steam | Proof
- VISIONPAK** Premier Thermoforming  
Solutions

# SOUS-VIDE



A full immersion cooking and chilling system allowing cooking at low and precise temperatures, designed for your product and conditions.



- › Customizable automated process for each product and facility size
- › Highest yield / capacity
- › Advanced sanitary design for pasteurization, seal, label, and package
- › Consistent quality: color, flavor & texture
- › Compact footprint



- ALKAR** Cook | Chill | Smoke  
Roast | Pasteurize
- Armor Inox** Automated Cook  
Chill | Ham | Sous Vide
- COLUSSI ERMES** Washing | Sanitizing | Drying
- COZZINI** Transport | Grind | Mix  
Brine | Massage | Emulsify
- DANFOTECH** Press | Massage | Tenderize  
Defrost | Separate | Mould
- HINDS-BOCK** Fill | Deposit | Portion
- RAPIDPAK** Rollstock Vacuum and  
Modified Atmosphere  
Packaging
- SCANICG** Freeze | Chill | Steam | Proof
- VISIONPAK** Premier Thermoforming  
Solutions



TOP OF THE LINE

# CASE READY



- › Best portioning yield with fixed weight packs
- › Consistent product quality at high capacity & yield
- › Compact footprint

- › All applications with loading / packaging - layout packs, stack-packs & hybrids
- › MAP, Modified Atmosphere Packaging



- CV-TEK** Modified Atmosphere Packaging
- COLUSSI ERMES** Washing | Sanitizing | Drying
- DANFOTECH** Press | Massage | Tenderize Defrost | Separate | Mould
- SCANICG** Freeze | Chill Steam | Proof
- THURNE** Slicing Systems Bacon | Meat | Cheese

TOP OF THE LINE

# PET FOOD



Bringing the highest quality food production to the pet industry

Material Handling / Grinding / Mixing & Blending / Size Reduction  
 Molding & Shaping / Drying / Freezing / High Efficiency Baking  
 Packaging / Facility Automation / Equipment Sanitation



- ALKAR** Cook | Chill | Smoke Roast | Pasteurize
- AUTO-BAKE SERPENTINE** Muffin, Cake and Bread Baking Systems
- Baker THERMAL SOLUTIONS** Proof | Bake | Cool
- COLUSSI ERMES** Washing | Sanitizing Drying
- COZZINI** Transport | Grind Mix | Emulsify | Pump
- CV-TEK** Modified Atmosphere Packaging
- maurer-atmos** Mature | Dry | Smoke Cook | Roast | Pasteurize Chill | Defrost
- SCANICG** Freeze | Chill Steam | Proof
- SPOONER VICARS** Complete Biscuit & Cracker Solutions
- VEMAC** AGV Robot Loading | Unloading





# ***PROCESSING & PREPARATION***

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**COZZINI**

**DANF<sup>globe</sup>TECH**

**H** **HINDS-BOCK**

**MP** **EQUIPMENT**



# COZZINI

+1 773 478-9700  
 cozsales@cozzini.com  
 www.cozzini.com

Emulsion / Grinding / Blending / Massaging /  
 Slicing / Bulk / Material Handling /  
 SUSPEN<sup>TEC</sup>® / FastHam®



With the most comprehensive range of grinding, blending, emulsion, material handling and slicing equipment, Cozzini sets the standard for quality and many years of reliable productivity.

Cozzini's decades of food industry and technical expertise bring the kind of insight and systems know-how to build innovation into production processes and your final products. While their equipment is powerful enough to meet the demands of the highest

volume processors, Cozzini also offers scaled-down systems and single machine solutions for smaller producers who demand the same quality and consistency in their products.

Cozzini's experienced product specialists and food scientists can help you develop new products or refine your existing ones. Their knowledgeable service technicians will keep your systems running perfectly for many years to come.



Emulsion / Reduction Systems



SUSPEN<sup>TEC</sup> Systems



Mixing & Massaging FastHam Systems



Grinding Equipment



CPF-7 Quadcut

- › 1 to 4 sets of plates & knives for coarse, fine or ultra-fine emulsions possible
- › Wide variety of plate and knife options



Versamill 5

- › 3.5 metric ton (8000 lbs/hr) output rate for lower volume processes
- › 125 mm (5") cutting head holds 2 - 4 knife sets
- › Gravity or force fed with a pump



Cozzini's CONTINUOUS SAUSAGE PRODUCTION LINES are sized to fit your needs. Centered around a PrimeCut™ emulsion system, the system combines grinding, blending, emulsion and stuffing operations into a single, efficient process.

Our FASTHAM® CONTINUOUS HAM PROCESS can reduce your massaging time by 50% or more and reduce or completely eliminate curing hold-time to facilitate continuous production with program-driven massaging cycles.

The SUSPEN<sup>TEC</sup>® PROCESS injects trimmings reduced to micron-sized particles in a brine suspension to enhance flavors, improve textures and increase yields in whole muscle beef, ham, turkey, chicken, pork, or fish.

CONTINUOUS PET FOOD PROCESSING LINES provide the highest percentage meat slurry inclusion. Continuous feed systems for canned, kibble and treats.



Slicing Equipment



Screw Conveying Equipment



Belt Conveying Equipment



Dumping Equipment





+1 773 478-9700  
 sales@danfotech.com  
 www.danfotech.com

**Meat Presses / Defrost Systems /  
 Ham Process Systems / Press Towers**



Danfotech produces, installs and services a wide range of machinery & specialized equipment for the food processing industry: bacon presses, defrosting lines, massaging tumblers, ham production lines, tenderizers and loading / unloading systems built around cook tanks or ovens.

**BACON PRESSES**

- › Optimize slicing yields by maintaining uniformity of pressed products
- › Capable of pressing from 8 to 14 units per minute
- › Ideal to temper product from crust frozen to core temps between 23F and 16F (-5C to -9C)
- › Die set sizes and shapes based on customer requirements
- › Fully automated loading and unloading option for all presses

**HAM PRODUCTION LINES**

- The fully automated HPT ham production system ensures efficiency and savings in manpower.**
- › The only manual operation is placing ham into the molds
  - › Gain a 40% capacity increase from your existing cooking/cooling equipment
  - › Produce up to 300,000 lbs. of ham per day



Danfotech is proud to introduce its new line of Shapetec™ Servo Presses, including the Type 10S and 14S, the only 4-direction (4D) servo presses in the world.

**DEFROST SYSTEMS**

The automated thawing system involves dividing frozen meat blocks and transporting them to a temperature controlled tumbler unit. Frozen blocks can be separated into single whole muscles without damaging the fibers or membranes.



- › Preserve the quality of the meat
- › No dripping or protein loss during thawing
- › Shorter processing times mean lower risk of introducing bacterial contamination
- › Transport systems can load a row of tumbler units with product to be thawed
- › Transfer thawed product directly to injection and tenderizing, tumbling or stuffing operations

*Type 14 S  
 Servo Flex 4D  
 Meat and Bacon Press*



*Type 10S  
 Servo Flex 4D  
 Meat and Bacon Press*



*Type 8S  
 Servo Flex 3D  
 Meat and Bacon Press*







+1 877 292-5715  
 sales.inquiries@hinds-bock.com  
 www.hinds-bock.com



*Industrial food production equipment for depositing, portioning, filling and pumping everything from sauces and chunky fillings to deli salads and ready meals.*



- › Single and Multi-Piston Depositors and Servo Fillers
- › Food Grade Transfer Pumps
- › Automated Production Lines:
  - / Tray filling / ready meal systems
  - / Bucket, pail and container filling and lidding
  - / Bottle and jar filling systems
  - / Horizontal packaging integrated systems
  - / Vertical packaging integrated systems
  - / Custom filling production systems



*P-50 Transfer Pump*



*SP-1L Single Piston Depositor*



*6 Piston Servo Filler with Bridge & Hopper Agitator*



ENGINEERING, SUPPORT AND PARTS

Hinds-Bock is proud to have an industry leading engineering department, support team, and state-of-the-art parts department.

- › Fully staffed engineering team that can design custom equipment according to your specifications. Hinds-Bock can also incorporate special modifications to their standard machines.
- › Hinds-Bock parts department is extremely efficient, typically they can ship inventoried parts the same day of the order...and they still support machines that are over 40 years old.
- › In-house technicians provide on-site installation and turn-key support for custom designed equipment and systems.



↑ **Servo Pump Filling Machines** with servo driven diving and traveling spout bridges for high speed production of Ready Meals



↑ **Up to 200 trays per minute** – Bridge and multi-piston, filling system operates over tray sealer indexing conveyors



↑ **Custom food application system for industrial high volume food production**





+1 770 503-7605  
 sales@mpequipment.com  
 www.mpequipment.com

**SpotOn™ Further Processing / Formers /  
 Frying Systems / Breaders / VCS Batter Mixers /  
 Portioning Equipment**



With a 50-year commitment to the further processing industry, processors depend on MP Equipment to bring them superior engineering, innovation and reliability.

**MP Equipment continually provides efficient solutions to your further processing challenges.**

Trust the entire line of **MPADVANTAGE™** field-proven equipment: portioning, marination, forming, batter / breading, frying and more to provide solid solutions to your unique further processing needs. Designed and built for life in the food production industry, MP Equipment features:

- › Energy Efficiency
- › Hygienic Design
- › Stainless Steel Construction
- › Easy Touchscreen Controls
- › Allen Bradley PLC/HMI, recipe driven
- › Full Line Integrated Controls



SpotOn™  
 MegaJet™ Water Cutter  
 Large variety of cuts available



MP SpotOn™ Marination System



MP Batter Applicator



MP 115 Flat Breader



MP Quad Marination System



MP DUOMAX Flexible Breader  
 Patent Pending



MP ADVANTAGE™ Frying System  
 Patent Pending

**FRYING SYSTEMS**

MP ADVANTAGE™ Frying Systems feature a robust tank design that requires less maintenance and incorporate product transport systems that extend belt life. The HelyX™ heat exchanger maximizes thermal capacity for fryers up to 52" wide. The quick-change removable tempura belt cartridge allows flexibility for tempura and non-tempura products.

**WATER CUTTING**

Experience superior production and yields at the lowest cost of ownership with the industry's leading 8-cutter machine. The SpotOn™ MegaJet™ and MiniJet™ Water Cutters feature accurate, reliable and flexible water jet technology.

**BATTER / BREADING**

Accuracy is the heart of all MP coating systems, allowing processors to exceed their quality and yield specifications. Batter mixing and breading products include the patented SpotOn™ VCS Batter Mixer, TCS Tempura Mixer, Batter Applicator, Flat Breader, Drum Breader and the revolutionary Duomax - both flat and barrel breaders in one.

**FORMING / MULTI-FLOW®**

MP formers provide unmatched quality and dependability. Featuring the optional patented Multi-Flow® system, models include the MP ADVANTAGE™ Servo Elite and Servo Simple. Heavy-duty stainless-steel frames are guaranteed for life. A wide range of tooling solutions are available.



Patented SpotOn™  
 VCS Batter Mixer



MP800 Servo  
 Simple Former  
 (All Servo)





# ***THERMAL PROCESSING***



***ALKAR***

**Armor  
Inox**

  
**maurer-atmos**

**scanico**



**THERMAL PROCESSING**



+1 608 592-3211  
sales@alkar.com  
www.alkar.com

**Continuous Systems / Batch Ovens (Standard, High Temperature, Fermentation) / Chillers (Air, Brine, Glycol) / Pasteurization / Drying Rooms / Controls / Smoke Generators / Renovations**



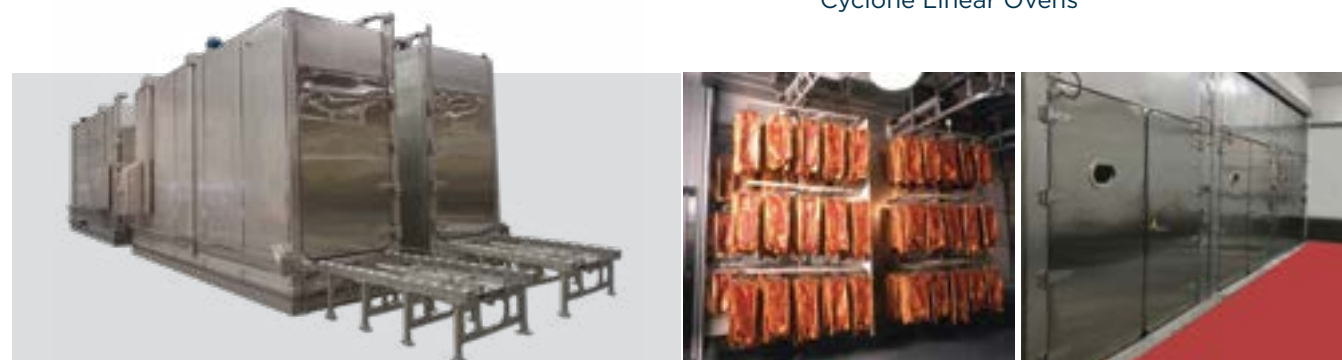
Since ALKAR's beginning in the 1950s, installations have grown to nearly 400 continuous systems and 6,000 batch units.

Unwavering dedication to customer support, engineering and manufacture of custom thermal processing solutions paved ALKAR's way to its present position as industry leader in the meat/protein thermal processing segment.

**CONTINUOUS PROCESSING SYSTEMS**

ALKAR offers the most extensive and highest performing line of continuous processing systems.

- › Hot Dog and Sausage - J-Con™
- › Compact through Mega Capacity
- › Bacon - High Performance Progressive Batch Systems
- › Co-Extruded & Edible Casing Sausage - PURE Link™
- › Deli Meats & Pasteurization - Serpentine
- › Links, Patties, Nuggets, & Rapid Smoke - Cyclone Linear Ovens



**HIGH PERFORMANCE BATCH OVEN & CHILLING SYSTEMS**

ALKAR batch systems offer a full range of configurations and capabilities from 500 to 50,000 lbs. capacity, direct or indirect gas heat, steam coil heating, hot oil, high temperature (500° F / 260° C). Choose between high performance air or brine (recirculated liquid) chilling.

- › Rapid Air Chill Systems
- › Drying and Fermentation Rooms
- › BBQ Ovens

**CONTROLS**

ALKAR'S process control systems allow data collection, product tracking, and provide you with all the information necessary to comply with regulatory requirements and efficiently operate your facility. ALKAR's wireless temperature probes also track internal and environmental temperatures throughout the entire cooking and chilling process.



by



The only linear industrial oven in the world with the combination of microwave, convection hot air heating, and humidity control.

Reduce Cook Times up to 60%! Increase existing line capacities. Optimize product quality while increasing operational throughput with minimal maintenance. All stainless steel process belt.



**RENOVATION & AUXILIARY EQUIPMENT**

ALKAR provides renovations and updates to even its earliest systems. Many systems are operating beyond 40 years. ALKAR provides a wide range of ancillary equipment:

- › Material Handling: trucks, trees, cages, racks
- › Conveyors: chain, belts, overhead rail.
- › Smoke Generators
- › Replacement Parts

**PASTEURIZATION**

ALKAR provides continuous and batch pasteurization systems for surface (3-5 mm depth) or deep (core) product applications. Post-pasteurization chilling units reduce temperatures for storage.





**THERMAL PROCESSING**



+33 (0)297 22 62 63  
 contact@armorinox.com  
 www.armorinox.com

**Thermix™ Systems / Cooking and Chilling /  
 Product Molds / Logi-Flex™ Systems /  
 Camatix Pasteurization Systems  
 Kitchenix / Original Sous Vide Water Cooking &  
 Chilling for Restaurants and Caterers**

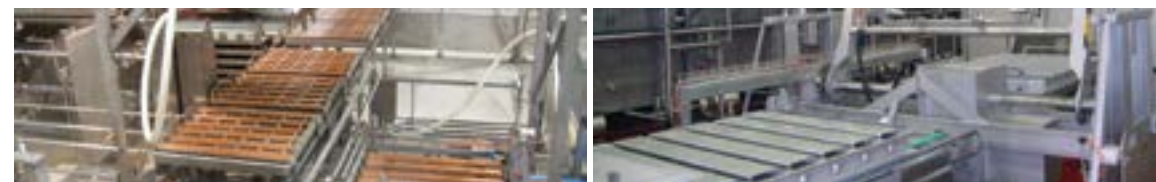


The industry has recognized Armor Inox as the worldwide proven solution for continuous, fully automated thermal processing applications of cooked meat, both deli and slicing logs, and ready meals. High output shaping and cooking/chilling technology delivers dependable, consistent flow of products at the lowest operation costs.

SHAPE, COOK, & CHILL

The Thermix™ system is a fully integrated solution to automatically shape, cook, chill and move cooked meat within the processing system. With the Armor Inox system, processors can produce from 20 to 200 metric tons per day with as little as 2

employees. The Thermix™ system combines high output with production flexibility, optimum production performances with high productivity, low operation costs with large savings of energy, and food safety with complete product traceability.



PROCESS CONTROL WITH PRODUCT CONSISTENCY

The Thermix™ system significantly improves process control and product consistency while dramatically reducing labor cost and energy consumption.

The modular Thermix™ processing system allows total control of the product cook, cool and chill process cycles for consistent repeated results, ensuring the highest cooking yields.

The Multimolds™ technology shapes and molds product with consistent accurate dimensions for

optimum product shapes, providing superior finished products and the highest slicing yields.

The Logi-Flex™ system provides a large variety of handling solutions, from molding to finished product unloading to slicers, racks or pallets...

Aarmor Inox offers proven solutions backed by a worldwide reputation for performance, reliability and cost effectiveness.



**Camatix**  
 Pasteurization Systems

**Thermix™**  
 Sous Vide System

**Kitchenix**  
 Original Sous Vide Water  
 Cooking & Chilling



THE ORIGINAL SOUS VIDE COOKING SYSTEM BY ARMOR INOX

**A Thermix™ Sous Vide System** covers a large range of possibilities for RTE foods: ready meals, cooked meat, beef, pork, chicken, fish/seafood, eggs and vegetable that can be differentiated through various processes before being packaged. Fresh, safe and natural organic products of superior quality, convenient and proven

shelf life at the lowest operating cost. The automated system works continuously at a steady pace of 1,000 to 10,000 pounds / hour with various levels of handling automation delivering constant flow.

Aarmor Inox has become the most recognized name in "sous vide" automated cooking and chilling

systems. More than 160 Thermix™ systems are in operation worldwide, with proven reliability for over 35 years. The Thermix™ System's streamlined design results in exceptionally low maintenance costs.





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 www.maurer-atmos.com

**Fermenting / Cold-Smoking / Maturing / Drying Rooms** (optionally fully automated) / **Thawing / Defrosting Rooms** (optionally fully automated) / **Hot Smoking / Cooking & Cooling / Baking & Roasting Systems in batch and semi-continuous design** (optionally fully automated) / **Smoke Generators / Related Add-Ons**



Maurer-Atmos is known for high-quality smoke and production systems and is a leading provider in the thermal processing of meat, fish and poultry products.

Maurer-Atmos is the global technology partner in the field of thermal product processing and has over

70.000 installations worldwide. Maurer-Atmos stands for efficient production systems and innovative engineering solutions. Their headquarters and production facility - Made in Germany - are located in Reichenau on Lake Constance. Across the globe, they are represented by business partners in more than 90 countries.

BATCH

- › Wide variety of batch systems to satisfy every thermal processing requirement
- › Exceptional air-flow
- › Size: 1-20 carts
- › Different kinds of smoke-generators
- › Cooling and heating power variables adaptable to customer need

AUTOMATED BATCH SYSTEMS

- › Batch systems for higher racks (up to 3,25m high)
- › Automated load / unload of the racks (by Vemac)
- › Automated handling of the racks (AGV provided by Vemac)
- › Allows fully automated and flexible production of mixed products

SEMI-CONTINUOUS SYSTEMS

- › Inline production (combination of hot and cold batch-system)
- › 100% separating between low and high risk areas
- › Different transport systems as floor transport, overhead rail and rollers

SMOKE GENERATORS

**Broad variety of external and internal smoke generators such as**

- › Sawdust
- › Woodchip
- › Friction
- › Clean smoke



Increased Capacity	<b>75-250%</b>
Shorter Process Time	<b>Up to 40%</b>
Space Savings	<b>75-250%</b>
Improved Yield	<b>1%</b>
Taste and Quality	<b>Improved</b>

INDUSTRIAL ROOMS FOR FERMENTING, COLD-SMOKING, MATURING AND DRYING

**Continuously fast, consistent and reproducible processes:**

This unique system is able to perform the maturing and drying process without any breaks. Due to the control of relative humidity and temperature for inlet and outlet air, it is possible to dry products without any variation.

- › With our industrial systems for fermenting, cold-smoking, accelerated maturing and drying, our customers can achieve greater capacity in the same footprint with 6-meter-high racks at a load capacity of up to 1800 kg of fresh meat per rack. The optimum utilisation of floor space and room height results in a capacity increase of up to 250%.
- › This system saves up to 40% of the process time by regulating the relative humidity and temperature for the supply and exhaust air. So, it is possible to dry products without fluctuations. The system is able to move the air continuously (100% of the time), without rest periods.
- › This in turn means a complete uniformity of the products that is about a 1% deviation in the entire processing room. Our customers produce reproducible goods without surface crust.





# scanico

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 www.scanico.com

**Spiral Systems / Freezers / Coolers / Steamers and Pasteurizers**



Scanico has delivered innovative solutions to customer needs since 1989, focusing on development and manufacture of high-quality industrial freezing and cooling systems. Scanico's systems are designed to ensure reliability, high productivity and finished food products that match the highest quality demands of our customers.

With more than 600 installations in 68 countries, Scanico offers freezing and cooling solutions for the protein industry in strong collaboration with our customers and other Middleby Brands. With every installation, our dedicated service personnel will ensure proper training from daily operation to routine maintenance backed by local Middleby service staff.

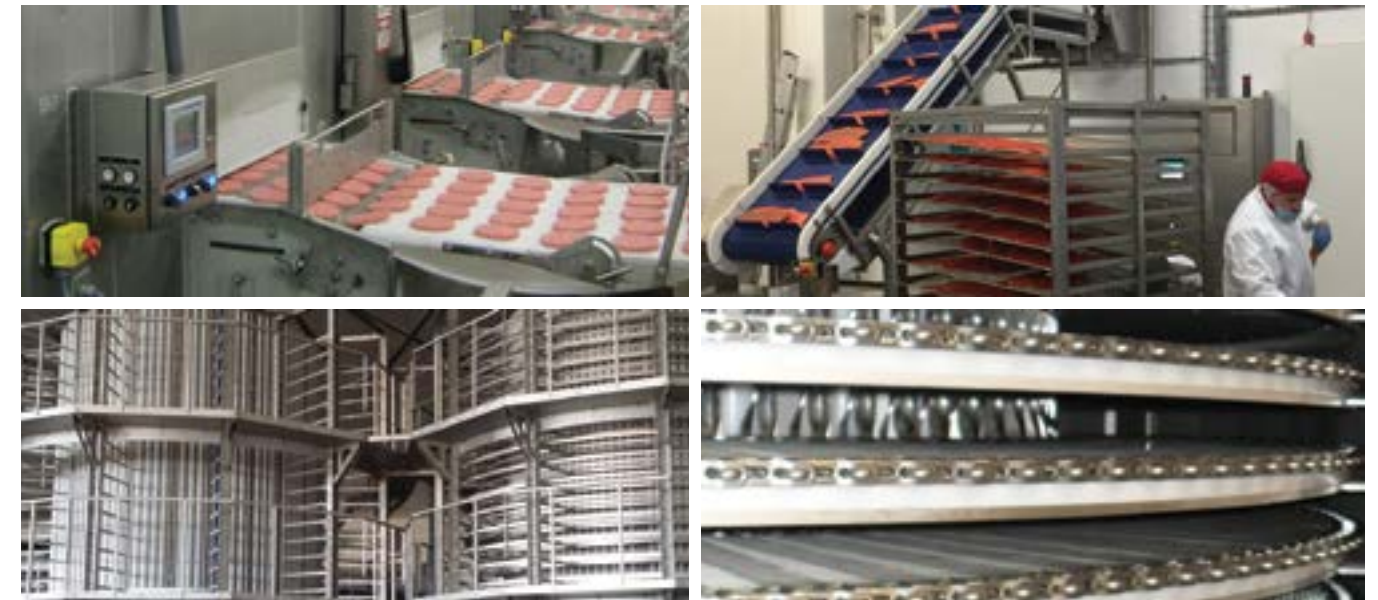
### INNOVATIONS

- › Improved hygienic design with fully welded enclosure providing sanitary environment for efficient freezing
- › Scanico spiral systems with "Direct Drive" belt eliminates overdrive failures and increases belt life. Highly suitable for applications with greasy, oily or sticky products. No belt slip and less risk of product disorientation issues.
- › Continuous bacon smoking line: Cooking, Smoking and Cooling

### EQUIPMENT FEATURES

- › Unique airflow resulting in fast freezing
- › Energy efficiency
- › Sanitary design
- › Highest production uptime between defrosts

Flexibility is in Scanico's DNA. Each system is custom made and designed in accordance with our customer's requirements. Scanico technology adds value to production plants throughout the world.



### SPIRAL SYSTEMS

Scanico manufactures spiral systems for different purposes within the food processing industry including: IQF freezing, cooling, steaming and pasteurizing. The use of stainless steel and foodstuff approved plastic for all surfaces with direct product contact ensures the highest hygiene standard.

In addition to standard non-stacking spiral systems, Scanico can supply the unique Single Stacking Spiral with the following advantages:

- › Flexible configuration to suit space available
- › Less belt supports for better product hygiene
- › Unique drives system
- › Capacity ranges from 500 lbs/hr to 1200 lbs/hr depending on model and product
- › One of the most compact spirals on the market
- › The most energy efficient spiral on the market
- › Capacity range up to 40 tiers



Patent pending

### TWINIMP-IMPINGEMENT FREEZERS

With Scanico TwinImp impingement technology, the freezing and cooling times are equal to cryogenic methods at lower operating costs. The advantages is:

- › Increased yield
- › Super product quality and appearance
- › A higher degree of food safety
- › Lower production costs

The Scanico TwinImp impingement technology is ideal for crust freezing, freezing of thin products and for most cooling applications. The advantages of the quick freezing/cooling times are:

- › Minimum product dehydration
- › Maximum product quality
- › Low operating costs compared to cryogenic
- › Compact footprint



Patent pending





# ***SLICING, LOADING & PACKAGING***



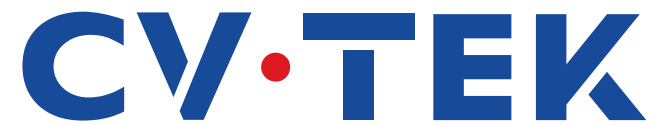
**CV·TEK**

**DRAKE**

*pacproinc*

**RAPIDPAK**

**THURNE** **VISIONPAK™**



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 sales@cv-tek.com  
 www.cv-tek.com



**Modified Atmosphere Packaging /  
 Case Ready / Poultry, Cheese, and Produce /  
 Bulk Packaging / Packaging Materials**

CV•TEK machines are built from the ground up with superior engineering, better value, more features, increased selection of options, faster delivery, and excellent after-sales support. CV•TEK has many successful installations on six continents.

Multi-station units incorporate all the features customers have requested while providing the safest, most sanitary and well thought out Modified Atmosphere Packaging machine of its kind. Available in 2, 3, 4 or more stations allowing unprecedented flexibility with higher

packaging speeds. Each module includes its own infeed as well as outfeed belt. Start with 2 or 3 stations and easily add additional modules in minutes as they interface and communicate by simply connecting a water-tight cable. Custom options include high and low oxygen systems and PLC programs.

The packaging solutions you need for IQF, Cheese, Meat, Nuts, Produce, Poultry, and Seafood as well as Resins, Powders and other Industrials.



**HYGIENIC DESIGN**

- › Clean-in-place system for internal cleaning
- › External wash down capability
- › Stainless steel snorkels

**FLEXIBILITY**

- › Specific option packages for meat, poultry, nuts, grains and industrial goods
- › PLC controls with flexibility of pre-set controls

**CUSTOM OPTIONS**

- › Custom PLC programs available
- › High and low Oxygen systems available

**SEAL INTEGRITY**

- › Digital temperature controls with hot bar system
- › Seal bar profiles minimize leakers
- › Standard bag stretchers eliminate wrinkles, ensuring leak-free seals

**REPRODUCIBLE RESULTS**

- › Heat seal manifold with positive vacuum gas seal design
- › PLC controls with digital vacuum and gas flush controls with low level gas alarm
- › Accumulator tank for accelerated speed of operation

**FreshVac®  
 MasterPACKerCenterSEAL®**

- › High Velocity “Quick Draw” Snorkel for superior vacuum and gas flush control
- › “On the Fly” changeover from High to Low O2
- › Exact system control through servo controlled motors and timing belts
- › Dual Gas Accumulator Tanks for High and Low O2
- › Dual impulse seal bar for perfect seals
- › Infeed conveyer with servo controlled linear actuators for fast and controlled feeding of trays
- › Patented ECO+ Film Management system designed to use Eco friendly 2 mil film
- › Capable of full integration with robotic pick and place systems







+1 540 569-4368  
 sales@drakeloader.com  
 www.drakeloader.com

**Cylindrical Product Alignment / Conveying / Inspection / 98% Fill Rate / Autoloading**

Globally leading the way in preparation for packaging with all configurations of systems that align, convey and load virtually any type of cylindrical product.

Drake high performance loaders are custom designed to your product specifications with an alignment unit and loading head. Maximum yields are achieved, while maintaining product integrity and aesthetics. Using patented

technology, product is indexed and aligned into individual buckets to convey to the loading head for placement into packaging. Touch screen controls allow the easy addition of new recipes and rapid adjustments to various areas of the loader to accommodate variety.

The minimization of human contact and easy cleaning procedures result in state-of-the-art-sanitation.



ALIGNMENT OPTIONS

**Launcher**

Quickly load fragile products such as cooked sausages and fresh cheese sticks. Unscrambler belts are used to sort and launch product. Models enable flexible film and box loading. Product diameter range - 14 to 32mm in 1, 2, 3, or 4 lanes.

**Singulator**

Fragile, curved natural casing product falls onto a narrow V-Belt to be arranged into flights on the conveyor. Primarily used to feed robotic loading heads. Product diameter range - 17 to 44mm in 1 or 2 lanes.

**Collator**

Frankfurters, sausages, vienna sausages, snack sticks, pickles, corn dogs, and other products fall into flights with the aid of stirrer paddles. Product diameter range - 12 to 32mm in 1 or 2 lanes.

**Centrifugal Feeder**

A variety of cylindrical product types are collected on a circular disc, mounted on an angle. This rotates at variable speeds to place product into flights. Product diameter range - 15 to 30mm in 1 lane per CF.

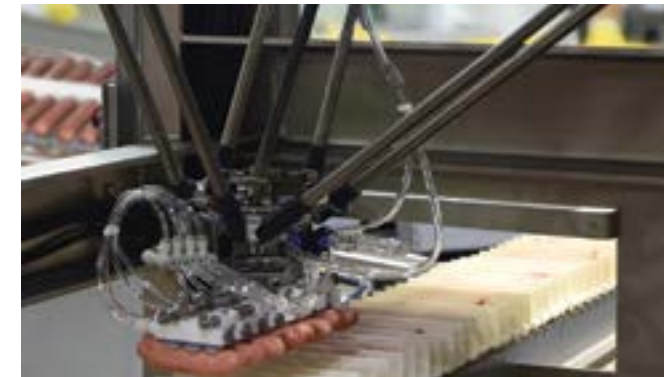


CF-1200 >



Sani-Chain Collator with Lower, Easy Access Removable Flights

- > Complete disassembly
- > Extremely easy to clean
- > Effortless reach and operation



LOADING HEAD OPTIONS

**Mechanical Placement**

Versatile loading heads offer quick changeover times to precisely deliver product into a variety of pocket configurations. A CLX or SWP head mechanically places product into packaging dies.

**Robotic Placement**

Adjusts to the flow of product through one easy-to-operate control platform and touchscreen for the entire system. High speed end of arm tooling gently

picks and places into packaging equipment. Drake custom food grade robotics were developed to increase capacity and maneuverability while remaining easy to program and maintain.

FANUC Authorized Systems Integrator and Rockwell® Automation Machine Builder Partner.

Packaging Solutions for Packaging Machines, Trays, Boxes, Cans Jars, Bags.





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www.pacproinc.com

Interleaving / Stacking /  
Card Dispensing / Interleaving Materials



Pacproinc manufactures standard and customized automation solutions for dispensing paper or film substrates under, around, and between food portions for the purpose of portion control, separation, quick prep, hygienic handling, freeze release, and traceability.

Customers benefit from significant packaging savings, reduced labor, increased throughput and improved food safety while being able to offer their end users a value added

INTERLEAVING

High Volume 300 Series Interleavers cut paper from a roll and dispenses a sheet under portions at speeds in excess of 300 cycles per minute. Machine widths from 6" to 32" and capabilities from 1 to 7 lanes. These interleavers can be paired with over 6 different stacking modules depending on the application.

food service and retail packaging format for foodservice fresh bacon, retail fresh bacon, pre-cooked bacon, fresh and frozen hamburgers, beef analog burgers, sausage patties, grab n' go deli, deli sub-kits, Philly steak, and cheese.

Our focus on total automation means that accuracy is as important as speed and Pacproinc manufactures the highest speed, most accurate interleavers, card dispensers and stackers available anywhere.

Low Volume 100 Series Interleavers cut paper directly from a roll and introduce the sheet under portions at 100 cycles per minute. Machine widths from 152mm to 305mm and capable of single or dual lane. These interleavers can be paired with three different stacking modules depending on the application.

CARD DISPENSING

The ProLeaver Card Dispenser is the fastest, most versatile and most accurate card dispenser for bacon L-boards on the market.

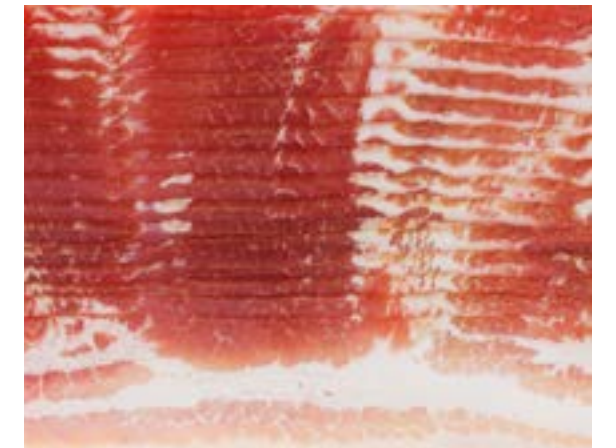
The patented design ensures better separation, fewer jams, and greater throughput as well as uptime. The system accuracy reduces the requirement for manual portion position correction "styling" downstream and enables the Pacproinc card folder and turner to further reduce retail bacon labor requirements.

Whether you need to run flap leading, flap trailing, no flap, clear cards, carrier boards or custom shapes the ProLeaver Card Dispenser will meet your needs.

STACKING

The ProStax CBS4 Cooked Bacon Stacker is a modular solution for automating the manual process of counting and stacking sheets of pre-cooked foodservice bacon.

The system is available in 2, 3, and 4 lane variants and employs a patented system to keep the bacon from sliding off of the paper regardless of cook level or how dry the product is. After stacking, the system combines all of the finished stacks into a single lane of flow for easy automatic loading into the packaging machine.



The ProLeaver CBI4 Cooked Bacon Interleaver is a modular paper dispensing system designed to accurately place the correct number of pre-cooked foodservice bacon slices on paper prior to stacking. This system can run programmable paper length at speeds up to 60 sheets/minute/lane. Each lane runs independent of the others and all lanes can be equipped with a 2nd unwind to extend your run time.



# RAPIDPAK

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 www.rapidpak.com

**Vacuum and Modified Atmosphere Packaging /  
 Meat and Poultry Applications / Cheese Applications /  
 Disposable Sterile Medical Device Packaging /  
 Hardware and Consumer Goods Packaging**



**Remarkable innovation paves the way to a rich mix of technological breakthroughs.**

Over three decades RapidPak has developed the most effective and efficient operation of horizontal form-fill-seal packaging equipment. Beginning in 1991, RapidPak revolutionized

packaging speeds and established unprecedented levels of sanitation with the invention and patented use of servo motors. Designing side extractable forming and sealing dies, confirmation stations, plug assists - along with lifting systems enabled users easy access to all equipment functions.



*When you think F-F-S packaging, think RapidPak*

**SERVO SEAL HEADS:  
 ELIMINATE COMPRESSED AIR  
 CONSUMPTION, DRASTICALLY  
 CUTS COSTS.**



INNOVATIVE PACKAGING SOLUTIONS FOR

- › **Meat and poultry applications**  
 Including whole muscle, processed and RTE portions. Retail and institutional. Vacuum and modified atmosphere
- › **Cheese applications**  
 Including bulk, sliced, shredded, string, unit of use portions and more. Vacuum and modified atmosphere
- › **Assorted food applications**  
 including pastas, ready-meals, institutional, etc.
- › **Sterile medical disposables**
- › **Hardware and consumer goods**



**CUSTOM SOLUTIONS FOR YOUR PACKAGING APPLICATIONS.**



5-POINTS OF DIFFERENTIATION

- 1** Servo Motor Everything
- 2** Industry's lowest cost of ownership
- 3** Industry's leading sanitary design
- 4** Industry's fastest, easiest changeovers
- 5** Industry's leading ergonomic design with ease-of-use features throughout



RP-25

**RP-25 is our fastest entry-level horizontal form-fill-seal packager**

- › Improved sanitation
- › Zero package defects due to cross-cutting
- › Easy-to-adjust controls





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Thurne High Performance Retail Bacon Slicing Line

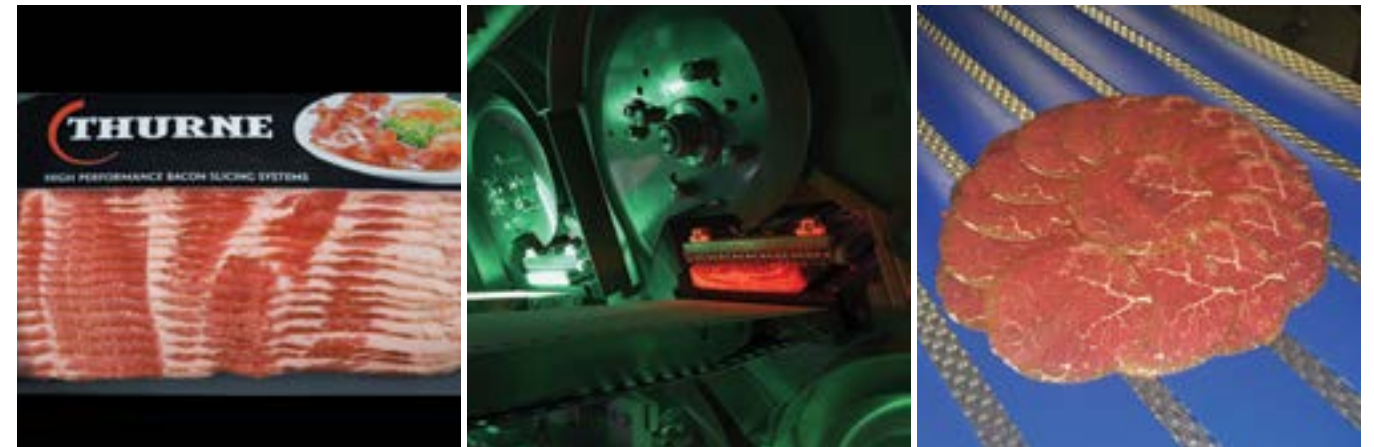
**Case Ready Meat Portioning Systems / Bacon Slicing Systems / Cheese Slicing Systems / Processed Meat Slicing Systems**

With more than 50 years of experience in the bacon, meat and cheese slicing industries, Thurne is renowned for innovative slicing and portioning systems that increase yield and productivity in processing plants around the world.

systems that are optimized to achieve maximum performance and presentation. Outstanding slice consistency and quality greatly enhances consumer appeal. High levels of first time on-weights enable reduced rework and lower manning levels.

Thurne's fully integrated slicing and portioning systems include slicers and portioners, process weighers, card dispensers and conveyor

Equipment conforms to stringent AMI and European safety standards, including CE certification.



In MEAT PORTIONING, Thurne's PortionX case ready meat portioner delivers high production volumes of clearly defined - pack ready - shingled groups and high-quality layout steaks.

Innovative product conditioning and scanning technology ensures consistent handling of variable product to optimise the performance for superb weight control.



The new generation of Thurne BACON SLICERS covers all common retail and food service pack formats, including carded, layout and stand-up drafts. A selection of predictive, vision and scanning options enables the slicers to deliver consistent performance, combining high throughput, maximum first time on weights, and low giveaway.

Thurne is revolutionizing PRECOOKED BACON SLICING with IBS4600, the world's first slicer to incorporate four independent feeds and blades with vision technology, offering unparalleled consistency in cooked slice presentation and quality.

In PROCESSED MEAT AND CHEESE SLICING, Polyslicer 1000 ensures high versatility in a wide range of product applications and pack formats, including the option to expand capabilities by retrofitting interleaver and variety conveyors to meet changes in demand.





SLICING, LOADING, & PACKAGING



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Premier Thermoforming Solutions

SMALL IN SIZE WITH BIG ADVANTAGES

Designed for processors of any size, the VisionPak™ VP110-CS offers a budget friendly, compact, yet versatile packaging machine that incorporates many of the design advantages you've come to expect from CP Packaging.

VP110-CS TECHNICAL INFORMATION

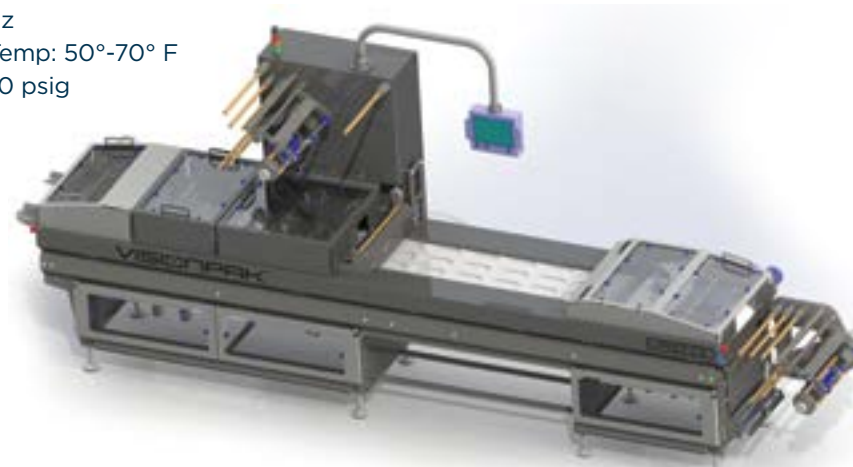
Package Draw Depth: Maximum 4"  
 Standard Web Width: 381mm (15") to 635 (25")  
 Standard Index: 203.2mm (8") to 533mm (21")  
 Cycle rates up to 14/minute  
 Machine length of 15'-19.5' including film roll  
 Swing arm HMI

UTILITIES:

Power: 240VAC 80 Amp 60/50 Hz  
 Water: 30-50 GPH @ 10-40 PSI; Temp: 50°-70° F  
 Air: Up to 40 CFM dry air at 80-90 psig

AVAILABLE OPTIONS:

- Upper/Lower Registration
- Servo Powered Lifts
- Gas Flush (MAP)
- Top Labeling
- Shape & Score Cutting
- Powered Exit Conveyor
- Scrap Wind Up



**1** BELT/CLIP FILM ADVANCE

- No stretching as found with industry standard chain systems
- Ultra sanitary - no lubrication required or chain tracks to fill with debris
- No costly chain replacement



PATENTED

**2** ACRYLIC MACHINE GUARDING

- Protects critical components
- See-through view of inner machine workings for easier maintenance, troubleshooting and sanitation
- Ensures safety for those in close contact with the machine



**3** POWERED FILM DRIVE

- Powered mandrel provides constant film tension during the index
- Mechanical core lock allows for superior tracking
- Optional festoon allows for long advance lengths
- Empty roll detection



**4** LIFT SYSTEMS

- Compact lift design maximizes performance in a small footprint
- Servo drive system with integrated electronic self-referencing and self-diagnostics
- Quick removal tooling for efficient product changeover



PATENTED

**5** PATENTED ADHESIVE ASSISTED CONSTRUCTION

- Weld free - no harborage points for bacteria
- Provides surface-to-surface hermetic seal
- Modular frame design allows machine to be broken down for easy shipping and component addition

*VisionPak™ features smooth and quiet operation and its design eliminates flat surfaces and hidden cavities.*

VISIONARY PACKAGING SOLUTIONS

Founded in 2004, CP Packaging designs and manufactures innovative packaging equipment which incorporates technological solutions to food packaging industry challenges. Our customers benefit from forward thinking design concepts and equipment that meet application needs while deploying world class safety and sanitation standards.





# ***FACILITY AUTOMATION & EQUIPMENT SANITATION***

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€ COLUSSI ERMES

Key-Log

 **PROXAUT**  
KEEP GOING

**VEMAC**





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 +1 858 384 2222  
 info@colussiermes.com  
 www.colussiermes.com

**Salami / Crate / Pallet / Bin / Rack Washing  
 & Crate Washer with Spin-Dryer**

**COLUSSI ERMES IS GLOBAL LEADER IN THE DESIGN AND PRODUCTION OF WASHING MACHINES FOR THE FOOD INDUSTRY, WITH OVER 6000 MACHINES BUILT AND SUPPLIED WORLDWIDE.**

Experience, research and know-how have allowed the company to specialise not only in the bakery industry but also in the meat, dairy, confectionery, fruit & vegetables, poultry and fishery sectors as well as in more complex fields such as the pharmaceutical, hospital, logistics and automotive industry.

Innovative design, rounded shapes, accurate details, high efficiency and ongoing research for perfection in order to achieve the absolute hygiene.

Colussi Ermes addresses a constantly changing market our machines ensure high-reliability and flexibility while achieving excellent washing results - in compliance with the existing hygiene standards.

Colussi Ermes' mission consists of determining the real requirements and expectations of every single customer and proposing innovative solutions.



**SALAMI WASHING**

**AUTOMATIC AND HIGHLY VERSATILE SYSTEM, DESIGNED AD HOC FOR THE MEAT INDUSTRY.**

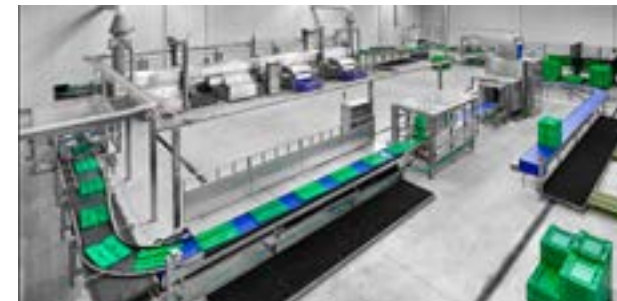
These systems are ideal for washing and blowing salami, speck, bresaola and other cured meats on racks and frames, or frames suspended from overhead rails. Our units ensure effective yet delicate washing, optimising production processes in full compliance with the most stringent hygiene standards removing all residues.



**TUNNEL CRATE WASHING**

**Automatic and highly versatile systems for great range of capacities.**

The crate washing systems are fully automated and designed according to extremely high quality protocols, as well as being designed and constructed specifically to customer requirements to increase efficiency and productivity.



**PALLET WASHING**

**Flexible hourly washing capacity, from a minimum of 20 to a maximum of 300 pallets/hour.**

The pallet washing systems are fully automated and allow to remove even the most stubborn residues. All units are manufactured according to extremely high quality protocols.



**RACK WASHING**

**This system has been carefully engineered to remove all types of residue or dirt.**

The rack washing systems with hygienic design are carefully engineered to wash different kind of equipment. The washing capacity is very flexible: from a min of 20 to a max of 120 racks/h.



**BIN WASHING**

**Automatic, highly versatile systems to wash bin with various shapes and types.**

Flexible washing capacity, from a minimum of 20 to a maximum of 120 racks/h. Available in the cabin version with a single door or double "pass-through" doors, or continuous tunnel version.



**CRATE WASHER WITH SPIN-DRYER**

**A machine able to combine large drying capacity with a minimum footprint.**

High capacities - up to 6,400 crates/h - along with perfect drying and the possibility to handle different crate sizes and types, set apart Colussi Ermes new generation centrifugal dryers from the rest.





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info@key-log.com  
www.key-log.com

Pallet transport line / Boxes transport line /  
Painted steel and stainless steel systems /  
Cartesian palletizer



**Key-Log** is a leading company in industrial automation, roller conveyors, pallets transport and plastic boxes and/or cardboard boxes of various sizes.

Key-Log's experienced founders offer customers industrial automation, customized according to their specific needs. Care is taken in every aspect of production, from design to delivery.

Solutions are tailor-made to every need and driven by research and development to create machines.

### INDUSTRIAL AUTOMATION CUSTOMIZED TO YOUR PRODUCTION NEEDS

#### FOCUS ON INNOVATION

Industrial automation is synonymous with innovation: Key-Log's team is able to offer tailor-made solutions for every need. Research and development guide the creation of the machines.

#### ATTENTION TO THE DETAIL

Key-Log begins the process with extensive consultation, taking time to understand current and future needs of each facility.



#### INNOVATION IS OUR STRENGTH

A young company whose founders have decades of experience. We ensure innovative, high quality products and services, delivered according to the customer's schedule.

#### A QUALIFIED & EFFICIENT TEAM

The Key-Log team is ready to handle all types of orders thanks to our skilled designers and technicians. Beginning with a feasibility assessment, each need is addressed step by step to aftersales assistance, available both remotely and at the customer location.

#### DESIGN OF GOODS HANDLING

Flexibility and problem solving allow us to identify ideal solutions. Engineers, with many years of experience in the industrial automation sector, track each order to ensure an alignment with the objectives and the project completion within the established timeline.







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### Automated Guided Vehicles

With an assessment of your production line by our team, these innovative vehicles are capable of effectively improving plant productivity and safety. All aspects of equipment manufacture are addressed by our engineers from mechanical

and electrical design, to software, to system management. Utmost care is taken to adhere to the highest, current safety regulations. Consultants remain available throughout installation and the production life of the vehicle.



Proxaut AGVs can be divided into two major categories with unique options based on their applications. These can be highly customized or a standard model. All are powered by high performance, low maintenance lithium batteries.

#### AGV PROXLOADERS

Maximum net capacity of up to 170 tonnes. New configurations of the entire production cycle are possible along with system flexibility versus a traditional fixed transport system.

With the adoption of an AGV loading plan these benefits are possible:

- › Multiple point product line interface
- › Stand-alone robotics or packaging lines
- › Versatile product offering potential
- › Labor reduction or available for other tasks

#### AGV PROXLIFTERS

A variety of capacities are available up to a maximum net capacity of 6000 kg, based on the quantities and type of load to be handled. They perform the task of picking up and depositing the goods to be handled, replacing the traditional forklift.

This group includes AGVs commonly known as very narrow aisle (VNA) AVGs and are available in two different models; with telescopic forks or a trilateral attachment, for applications up to 13 meters in height.

Driving system technology can be one of the following or a combination.

#### LASER GUIDED

Multiple advantages in terms of path versatility, guiding precision and therefore overall performance. The heart of the system is based on the vehicle's on-board computer and the related control software (Supervisor) developed by PROXAUT. The laser scanner provides the on-board computer with the X and Y coordinates and the direction in which the vehicle is moving.

#### INERTIAL

Course correction odometry system. At a certain defined distance along the path, passive markers or magnets are installed on the floor, which confirm the positioning of the vehicle and allow it to correct its trajectory if necessary. It is also possible to define complex and intersecting paths, with a minimised impact on the final installation.

#### WIRE GUIDE

Excellent performance in situations where the laser or the inertial system struggle to operate, such as high humidity, low temperatures, thermal variations, outdoor applications or obstacles in reading the beam. The guidance system involves the positioning on the floor of conductive wires with low frequency signals.







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**Automated Dry Cure Products / Handling / Lines / Molding / Transfer Transport / Sorting / Loading / Palletizing**



MAXI MOULD

The patented maxi mould is designed and manufactured for the industrial and automated production of raw prosciutto portions for slicing. The system consists of a series of superimposed moulds, each composed of rectangular tubes, welded together to form a shelf. An axial-stroke pusher is installed under each tube to press the

prosciuttos placed inside the tubes of the mould pictured below. The prosciuttos are pressed so that each portion has a uniform cross-section with a determined length. Two prosciuttos may be placed in each tube and may be pressed together (single bar) or separately.

Sequence of Operation

- |  |  |
|--|--|
| 1 Robot unstacks maxi mould to empty   | 4 Robot stacks full maxi mould to be pressed |
| 2 Chain handles maxi mould             | 5 Washing machine for maxi mould             |
| 3 Press prosciutto into the maxi mould | 6 Press machine for totem                    |



PROCESSING LINES FOR SALAMI AND DRY CURED PRODUCTS

New technologies for old traditions. Supported by the trust of our customers, we have revolutionized the process, introducing the latest generation of robot AGV (Automated Guided Vehicles) and handling systems.

Full automation of the entire system, from salami-making to packaging: Component preparation.

Vemac's Fully Automatic Functions:

- › Pick-up and orderly positioning of the salamis on sticks
- › Loading and unloading of these sticks onto racks ranging from 4 to 5½ meters high
- › Movement of the racks with robotized vehicles
- › Unloading of the salamis and feeding of the packaging line

STRENGTHS

- › Fully automatic product loading up to 5,5 m high
- › Flexible solution for loading both small, medium and large diameter products
- › Products consistency provided by equal spacing for optimum air circulation



AUTOMATIC FULL LINE COMBING AND DECOMBING

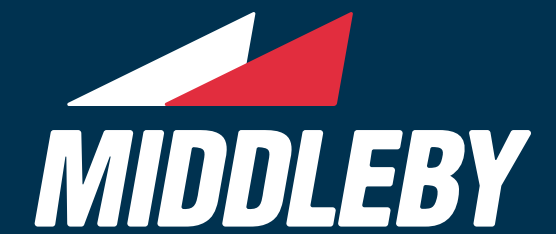
- › Reduced human contact and labor
- › Compact AGV product & rack transfer
- › Accurate loading and unloading



*The Maxi-Mould system ensures the best slicing yields*







EQUIPMENT THAT RUNS ON INNOVATION

***EVERGROWING  
SOLUTIONS FOR  
A FAST GROWING  
INDUSTRY.***



# PROTEIN INNOVATION CENTER

EXPERIENCE TOMORROW'S TECHNOLOGY, TODAY.

## The future of innovation, rooted in decades of expertise.

The home to a new series of production lines and industry changing equipment introductions. The innovative culture of Middleby is fostered in over 53,000 square foot havens for development with technical performance and product testing. Food scientists and specialized engineers are readily available.



### Protein Innovation Center

Cozzini, LLC  
2567 Greenleaf Avenue  
Elk Grove Village, IL, USA 60007  
Conveniently located near Chicago  
O'Hare International Airport  
+1 773 478-9700  
protein\_innovation@cozzini.com

### Bakery Innovation Center

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Plano, TX, USA 75074  
+1 972 509-8728  
bic@middlebybakerygroup.com

### Bakery Innovation Center India

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Anekal Taluk Plot No. 45  
Jigani Industrial Area Bangalore  
562 106 India

## HEAR IT FROM OUR CLIENTS

### Rapidpak

"Machines perform very well and deliver an excellent final package to our markets. RapidPak is our packaging machine of choice."

**Julian Sander**  
Division Manager Machinery  
Rieckermann  
Bangkok, Thailand

### Maurer-Atmos

"We are known for our naturally smoked Western Australian Christmas Ham, which we successfully produce every winter season with Maurer smokehouses. Since 2005 we have had a 10-trolley smokehouse with which we produce ham, sausages and our Italian specialities such as Coppa, Pancetta and various types of salami."

**John del Basso**  
Owner  
Del Basso Smallgoods  
Perth, Australia

### Thurne

"We looked for the most technically advanced slicer with the best technical support, in order to not only increase output and boost yield, but also to improve our slicing quality. Thurne provided that option and has become a very important part of our operation."

**Cody Lane**  
President  
Pederson's Natural Farms  
Hamilton, TX, USA

### Alkar / Armor Inox / Cozzini Danfotech / Thurne

"Fair, fast, reasonable, and brilliant. They've helped us grow, prosper and literally reinvent our company!!!"

**John Richardson**  
Chairman of the Board  
Sugar Creek  
Cincinnati, OH, USA

### MP Equipment

"Confidence in our relationship with MP Equipment over the years has allowed Monogram to continuously improve our systems based on shared experiences with our batter / bread and fry lines."

**Matt Davis**  
Sr. Project Engineer  
Monogram Food  
Bristol, IN, USA

### Alkar / Armor Inox / Cozzini Drake

"We completed the project as scheduled, in an aggressive time frame... Production ramp-up has been smooth and as expected - we look forward to doing business with them again."

**Renato Cantu**  
Director de Proyectos Especiales  
Grupo Lala  
Mexico City, Mexico

### Drake

"One thing I can say emphatically is that Drake is customer focused and will do what it takes to make the customer happy..."

**Kevin Salva**  
President  
Zweigle's Inc.  
Rochester, NY, USA





# RAISE THE BAR, LOWER THE FOOTPRINT.

At Middleby, we are committed to making a positive impact in the communities in which we live and work. We realize that the way we conduct business today impacts both current and future generations to come.

**We have made it priority to balance the management of people, profits, and our planet.**

Our financial investments and product innovation efforts are focused on solutions that reduce energy consumption, lessen water usage and food waste, minimize emissions and carbon footprint, and enhance safety in the workplace and at home. We have built these sustainability objectives into our development and innovation processes, which is core to our culture.

Middleby's commitment to the SDGs focuses on topics most material to our industry and issues where we can have the most impact.

**At Middleby, we develop innovative, industry-leading food processing equipment designed to reduce pollution, conserve energy, and minimize waste.**

Our sustainability efforts are most aligned with the following United Nations Sustainable Development Goals:



# LESS WASTE MORE IMPACT.



REDUCE GREENHOUSE GAS EMISSIONS



MINIMIZE WASTE



MINIMIZE ENERGY CONSUMPTION



OPTIMIZE WATER CONSUMPTION



Danfotech Bacon Presses

Danfotech bacon presses utilize a 3-dimensional press chamber to press bacon, Philly steak, roast beef and other products to increase slicing yield and efficiencies. Danfotech's technology does not use a conventional hydraulic press in the system. This results in **water savings** because water is not needed to cool the conventional hydraulic operated press.



TurboChef by Alkar

The newly introduced linear TurboChef by Alkar oven provides food processing facilities with the flexibility of microwave and convection heating. Aspects of this technology increase the microwave energy rate absorption, resulting in a **significant reduction in energy consumption** as compared to a typical microwave line at a food processing facility. Middleby's cross-pollination of innovation among its three business segments is one way that Middleby supports its commitment to Responsible Consumption and Production as a United Nations Sustainable Development Goal.



Pacproinc Packaging Technology

Newly developed Pacproinc technology allows deli customers to **reduce the amount of single use plastics** in their packaging. Using Pacproinc technology, customers who currently use plastic dividers and trays in their packaging process can replace the plastic tray underneath product slices with one paper that is folded around the cheese. This technology allows paper to be sliced and folded over the food product, enabling consumers to easily remove the product slices from the packaging. The paper tray replaces plastic, resulting in more environmentally friendly packaging.



## PROCESSING & PREPARATION

### COZZINI

Transport | Grind  
Mix | Brine |  
Massage | Emulsify

### DANFOTECH

Press | Massage  
Tenderize | Defrost  
Separate | Mould

### HINDS-BOCK

Fill | Deposit  
Portion | Pump

### MP EQUIPMENT

Portion | Form  
Batter | Bread | Fry

## THERMAL PROCESSING

### ALKAR

Cook | Chill | Smoke  
Roast | Pasteurize

### Armor Inox

Automated Cook  
Chill | Ham  
Sous Vide

### maurer-atmos

Transport | Grind  
Mix | Brine | Massage  
Emulsify

### scanicg

Freeze | Chill  
Steam | Proof

## SLICING, LOADING & PACKAGING

### CV-TEK

Modified Atmosphere  
Packaging

### DRAKE

Align | Convey  
Autoload

### pacproinc

Interleavers | Stackers  
Interleaving Materials

### RAPIDPAK

Rollstock Vacuum and  
Modified Atmosphere  
Packaging

### THURNE

Slicing Systems  
Bacon | Meat | Cheese

### VISIONPAK™

Premier Thermoforming  
Solutions

## FACILITY AUTOMATION & EQUIPMENT SANITATION

### COLUSSI ERMES

Washing | Sanitizing  
Drying

### Key-Log

Automated Logistic  
Solutions

### PROXAUT

Automated Guided  
Vehicles

### VEMAC

AGV Robot  
Loading | Unloading

## INDUSTRIAL BAKING

### AUTO-BAKE SERPENTINE

High Capacity Serpentine  
Solution for all Bakery  
Categories

### Baker THERMAL SOLUTIONS

Proof | Bake | Cool

### Burford

Pan Shakers | Topping  
Applicators | Water Splitters  
Closure Systems

### ESCHER

Professional Mixers

### Glimek

Bread Dough  
Make-up Machinery

### HINDS-BOCK

Fill | Deposit  
Portion | Pump

### INLINE FILLING SYSTEMS

Liquid Packaging Systems

### pacproinc

Interleavers | Stackers  
Interleaving Materials

### scanicg

Freeze | Chill  
Steam | Proof

### SPOONER VICARS

Complete Biscuit and  
Cracker Solutions

### STEWART SYSTEMS

High-Capacity Bread and  
Bun Conveyorized Systems

### SVEBA DAHLEN

Professional Baking  
Machinery





**ONE PARTNER,  
MANY SOLUTIONS.**

**MIDDLEBY WORLDWIDE (MWW)  
SALES, PARTS AND SERVICES OFFICES**

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## OUR BAKERY BRANDS



High Capacity Serpentine  
Solution for all Bakery Categories



Proof | Bake | Cool



Pan Shakers | Topping Applicators  
Water Splitters | Closure Systems



Professional Mixers



Bread Dough  
Make-up Machinery



Liquid Packaging Systems



Complete Biscuit and  
Cracker Solutions



High-Capacity Bread and  
Bun Conveyorized Systems



Professional Baking Machinery

## OUR PROTEIN BRANDS



Cook | Chill | Smoke  
Roast | Pasteurize



Automated Cook  
Chill | Ham | Sous Vide



Transport | Grind | Mix  
Brine | Massage | Emulsify



Modified Atmosphere  
Packaging



Press | Massage | Tenderize  
Defrost | Separate | Mould



Align | Convey | Autoload



Defrost | Cook | Chill  
Smoke | Roast | Pasteurize  
Dry | Mature



Portion | Form  
Batter | Bread | Fry



Rollstock Vacuum and  
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Slicing Systems  
Bacon | Meat | Cheese



AGV Robot  
Loading | Unloading



Premier Thermoforming Solutions

## OUR PROTEIN AND BAKERY BRANDS



Washing | Sanitizing | Drying



Fill | Deposit | Portion | Pump



Automated Logistic  
Solutions



Automated Guided Vehicles



Interleavers | Stackers  
Interleaving Materials



Freeze | Chill  
Steam | Proof





**We don't just  
build equipment.**

**We build  
breakthrough  
solutions.**

[www.middprocessing.com](http://www.middprocessing.com)